

AMENDMENTS TO THE CLAIMS

1-34. (cancelled)

35. (previously presented) An apparatus for making reinforcement ply material comprising an elastomeric sheet and a plurality of reinforcement elements embedded therein; wherein the reinforcement elements are grouped in untwisted sets and each set contains a plurality of reinforcement elements; wherein adjacent reinforcement elements in the same set are spaced apart an intra-set distance and adjacent reinforcement elements in different sets are spaced apart an inter-set distance; and wherein the inter-set distance is greater than the intra-set distance; the apparatus comprising:

an extruder and a die head into which the extruder extrudes an elastomeric material;

wherein the die head defines, at least in part, a die throat and includes a guide insert which guides the reinforcement elements into the die throat;

wherein the guide insert comprises passages through which the reinforcement elements pass and which are arranged in a pattern corresponding to the arrangement of the reinforcement elements in the reinforced ply material, such that one passage is provided for each set of reinforcement elements;

wherein each passage is substantially rectangular in cross-sectional shape; and

wherein each passage, alone, is configured to guide the reinforcement elements of one of the sets of reinforcement elements into the die throat and to define the position and spacing of the reinforcement elements of such set of reinforcement elements in the reinforcement ply material.

36. (cancelled)

37. (previously presented) The apparatus of claim 35, wherein each passage has a uniform, substantially rectangular cross-section substantially along its entire length.

38. (previously presented) The apparatus of claim 35, wherein the lateral distance between passages is between about 0.20 mm and about 0.50 mm.

39. (previously presented) An apparatus for making reinforcement ply material that includes an elastomeric sheet and a plurality of reinforcement elements embedded therein, the reinforcement elements being grouped in sets such that each set includes at least two reinforcement elements, wherein adjacent reinforcement elements in the same set are spaced apart an intra-set distance and adjacent reinforcement elements in different sets are spaced apart an inter-set distance that is greater than the intra-set distance, the apparatus comprising:

an extruder and a die head into which the extruder extrudes an elastomeric material;

the die head defining, at least in part, a die throat and including a guide insert, the guide insert including a plurality of passages through which the reinforcement elements pass, the passages being arranged in a pattern corresponding to the arrangement of the reinforcement elements in the reinforced ply material such that one passage is provided for each set of reinforcement elements;

wherein each passage is configured to guide the reinforcement elements of one of the sets of reinforcement elements into the die throat; and

wherein each passage has a uniform, substantially rectangular cross-section substantially along its entire length.

40. (cancelled)

41. (previously presented) The apparatus of claim 39, wherein the lateral distance between passages is between about 0.20 mm and about 0.50 mm.

42. (previously presented) An apparatus for making reinforcement ply material that includes an elastomeric sheet and a plurality of reinforcement elements embedded therein, the reinforcement elements being grouped in sets such that each set includes at least two reinforcement elements, wherein adjacent reinforcement elements in the same set are spaced apart an intra-set distance and adjacent reinforcement elements in different sets are spaced apart an inter-set distance that is greater than the intra-set distance, the apparatus comprising:

an extruder and a die head into which the extruder extrudes an elastomeric material;

the die head defining, at least in part, a die throat and including a guide insert, the guide insert including a plurality of passages through which the reinforcement elements pass, the passages being arranged in a pattern corresponding to the arrangement of the reinforcement elements in the reinforced ply material such that one passage is provided for each set of reinforcement elements;

wherein each passage is configured to guide the reinforcement elements of one of the sets of reinforcement elements into the die throat and to define the position and spacing of the reinforcement elements of one of such set of reinforcement elements in the reinforcement ply material,

wherein each passage includes a front end having a substantially rectangular cross-section and a rear end having a substantially rectangular cross-section, the substantially rectangular cross-section of the front end of each passage having substantially the same dimensions as the substantially rectangular cross-section of the rear end of each passage.

43. (cancelled)
44. (cancelled)
45. (previously presented) The apparatus of claim 42, wherein each passage has a uniform rectangular cross-section along its length.
46. (previously presented) The apparatus of claim 42, wherein the lateral distance between passages is between about 0.20 mm and about 0.50 mm.
47. (cancelled)
48. (previously presented) The apparatus of claim 38, wherein the lateral distance between passages is between about 0.30 mm and about 0.45 mm.

49. (previously presented) The apparatus of claim 41, wherein the lateral distance between passages is between about 0.30 mm and about 0.45 mm.
50. (previously presented) The apparatus of claim 46, wherein the lateral distance between passages is between about 0.30 mm and about 0.45 mm.
51. (cancelled)